

- ① What is biogeochemical cycling? The process of going from living things to non-living and back to living, again.
- ② What mnemonic device was used to remember atoms that life needs to survive?
CHNOPS
- ③ Carbon has 4 valence electrons, making it good at bonding.
- ④ Hydrogen is important because it is used to make water molecules + Energy transfer.
- ⑤ Nitrogen is important because it is used to build: nitrogenous bases + amino acids.
- ⑥ Oxygen is important in the process of cellular respiration.
- ⑦ Phosphorous is used in building phospholipids + ATP.
- ⑧ Sulfur is important because it is used to provide structure for large proteins.
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- ⑨ Water is stored mostly in oceans.
- ⑩ What are the three steps to water cycle?
Evaporation, Condensation/Transpiration, precipitation
- ⑪ Carbon is stored mostly in the atmosphere.
- ⑫ How is carbon returned to the atmosphere? respiration / cellular respiration
- ⑬ What transforms N_2 gas into a form that plants can use? nitrogen-fixing bacteria
- ⑭ How does nitrogen get back into the atmosphere? Denitrifying bacteria convert back to atmospheric nitrogen
- ⑮ Where is phosphorous stored? Rocks
- ⑯ How does phosphorous get into the soil for plants to absorb? Weathering

Bonus: Phosphorous in rocks → weathered into soil → plants absorb phosphorous → animals consume plants